

Disaster Recovery

Introduction

County agencies and authorities are required to provide for the protection of their records by statutory law. The law recognizes that security is a fundamental factor in records management because governments are dependent upon records to document their actions and transactions, and thereby protect the rights of citizens. A comprehensive records management program can prevent the untimely destruction or decay of records and is the most efficient disaster prevention strategy for county government.

The safeguards required for records span the range of simply using a records storage center for semi-current records which are kept temporarily (see section III), to the complex, environmental controls required for permanent records administered by an archives (see section IV). Additionally, a vital records protection program preserves that fraction of records which are critical to continuing daily business against total destruction due to ordinary hazards or extraordinary calamities such as hurricanes, earthquakes, fire, flood, explosions, or any other natural or man-made disasters. (see section VII)

Even if a county has not yet instituted a comprehensive records management program because of budgetary or other constraints, a vital records program can minimize the effects of a calamity. Disaster recovery or salvage techniques are enormously simplified by the implementation of even minimal preventive measures.

Objective of a Disaster Recovery Program

The objective of a disaster recovery program is to salvage records which have been damaged by accidents or disasters in the most efficient and economic manner possible. In the public sector, a disaster recovery program is necessary to reconstruct vital information needed to ensure the continued operations of government.

The Process of Disaster Recovery

Preliminary Concerns

County officials must be aware of their record holdings. This knowledge should include not only the identification of record series and their retention and disposition dates, but also their value to

the daily operations of government: nonessential, useful, important or vital (see VII-2). Disaster prevention and recovery efforts are restricted to vital records protection because records salvage techniques are expensive and time consuming and are not cost justifiable for non-vital records.

Two disaster prevention services must be emphasized:

1. **On-site and off-site vital records considerations** — include the analysis and improvement of buildings or facilities, equipment and supplies, as well as the institution of procedural controls (see VII-2) to protect against damage or destruction from fire, water and other disasters, fluctuations of temperature and humidity, infestation by pests and vermin, and pollution.
2. **Safeguarding privacy and security of records** — through creating access authorization procedures and instituting theft prevention measures in on-site storage locations.

Periodic inspections of active files and an agency's active records storage facilities should include random examinations of file cabinets and storage boxes for signs of deterioration. Also, access to records should be monitored to determine that records are secure.

Although there can never be an absolute guarantee against destruction from a disaster, vital records protection can provide a cost-justifiable strategy to minimize the effects of a calamity. Time and money spent to prevent a records disaster will always be less than the cost of a salvage operation.

Salvage Operations

Despite the steps taken to prevent disaster, records will occasionally be damaged. Coordination and speed are extremely important for effective salvage efforts. Once conditions become favorable for records deterioration, reversing damage becomes less successful the longer salvage is delayed. For example, mold will grow on wet paper within 48 hours. The following guidelines are recommended to assist state agencies and authorities in conducting a salvage operation:

1. **Building inspection** — As soon as possible after fire, flood, explosion or other calamity, officials with expertise in electrical, building and fire safety should examine a facility for potential hazards and certify its safety.
2. **Communications Center** — In some cases, it may become necessary to set up temporary location in the immediate vicinity of the salvage operation with telephones or walkie-talkies.
3. **Recovery Coordination** — The lines of authority and responsibility should be clearly established by the:
 - a. **Coordinator** — An appropriate official should be appointed to oversee recovery efforts, and
 - b. **Departmental Liaisons** — Officials with custody of records that have been damaged in the disaster should be assembled by the coordinator to aid in identification of records.

4. **Logistical Support** — Appropriate staff and equipment will be needed to conduct a records salvage operation successfully, and include:
 - a. **Employees** needed to assist in the salvage operation may include truck drivers, sanitation workers, local police and fire officers, and building maintenance workers, among others.
 - b. **Equipment and supplies** needed to accomplish salvage objectives will depend upon the nature of the records disaster and can include temporary lighting, communications, transportation, tables, containers, and chemicals, and
 - c. **Consultants** needed to assist in the salvage operation include a records analyst to identify retention requirements and authorize legal disposition, and an archivist to treat salvageable records or identify future conservation needs. In some instances, a commercial contract vendor may also be required to participate in a salvage operation.

Salvage Methods

The coordinator, departmental liaisons and consultants begin to salvage records by:

1. Determining if a list of the records involved in the disaster exists, and where the list is kept.
2. Determining if there is an off-site storage location with duplicate records (e.g. master microfilm copies held at the Records Storage Center), and
3. Examining salvageable records to determine:
 - a. **What can be saved**, and
 - b. **What can be destroyed** through appropriate Request and Authorization for Destruction procedures granted by the division at the site.

In either of these cases, the identification of record series and their corresponding retention and disposition requirements forms the basis for decisions to save or destroy.

4. Salvageable records can then be packed and labeled to ensure continuing identification of the records.

After these steps have been taken, appropriate methods for salvaging vital records can be identified. Recommendations depend upon the nature of the records disaster:

1. **Water damage** — Whether the disaster is a fire or flood, records can be saturated. Water damaged records can be salvaged by:
 - a. **Fast drying** — A blueprint or photographic dryer can be used for small quantities of wet records. To prevent scorching or curling, documents should be run through several times at a low temperature setting.

- b. **Slow drying** — A photocopy dryer can be used. It is similar to a blueprint dryer, but removes moisture more slowly and can generally accommodate larger documents.
- c. **Space drying** — Spreading records on tables or floors in a room with fans circulating warm, dry air at slow speed can remove moisture from larger quantities of wet records. Salvaging water damaged records by this method requires an area large enough to accommodate the records and involves turning the records periodically.
- d. **Freeze-drying** — This is a process for drying substances by freezing them first and then going directly from solid to gas in a high vacuum at a low temperature. This minimizes water damage.

Plastic milk crates are ideal containers for packing waterlogged records because they readily allow for evaporation. After packing, freezer space must be acquired. Salvaged vital records are then frozen to prevent further damage. Arrangements may then be made with a private vendor to freeze-dry the records.

- e. **Blotting** — Bound volumes require special drying which includes placing them on end with covers spread apart and pages interleaved with blotting or absorbent paper that must be changed frequently. After the bindings have become partially dry by exposure to air, wax paper jackets may be used to allow flat storage with closed covers. The volumes may then be stacked with blotters under and between them with light pressure applied to flatten sheets and prevent warping of covers.
- f. **Film salvage** — Water-soaked film should be kept wet to prevent it from sticking together. Dirt and debris should be gently removed from film to avoid abrasion and film should be stored in clean water. Clean, wet film may then be rinsed in a solution to harden the emulsion before it is dried.

In those instances where mold has begun to grow on wet records, the records must be sprayed with a thymol-trichlorethylene solution to stabilize mold growth as soon as the records have been dried.

- 2. **Special handling considerations** — Drying alone may not be enough to preserve certain records. Assistance may be necessary to duplicate singed, scorched, or charred records. For example, seemingly illegible charred documents can often be read by exposure to ultraviolet light. Other preservation and conservation strategies that may be needed are similar to those required by archival records (see IV-4) and may include:
 - a. **Encapsulating documents** - in mylar or other polyester film,
 - b. **Microfilming** — the filming of damaged documents provides a means of generating durable working copies as well as archival master copies for permanent storage. This eliminates excessive handling of the original and helps prevent further deterioration.
 - c. **General Care and Handling** — Restoration, mending and cleaning techniques require special expertise in order to ensure that their application does not unwittingly aid deterioration.

3. **Salvage of Permanent or Archival Records** — Although the primary concern of a disaster recovery effort is salvaging vital records, many permanent records, such as manuscripts, maps and other intrinsically valuable documents cannot be considered vital because they are not necessary for the daily operations of government. However, county agencies and authorities are legally required to maintain these records for their continuing historical, legal, fiscal and aesthetic value.

Because of their enduring value, no salvageable permanent records will be authorized for destruction by the division. However, such permanent, non-vital records are inactive. Their complete restoration may be postponed, provided that the condition of the records has been stabilized, and a delay in the application of conservation techniques would not threaten the records.

Records salvage is expensive and time consuming. Salvage efforts should always be conducted by qualified, experienced professionals. Counties can minimize the adverse impact of disasters by implementing vital records protection programs and establishing a disaster recovery plan. A disaster recovery plan confers authority and identifies the elements of a records salvage operation before a calamity strikes.

It is especially important that information needed for a disaster recovery program be updated on a regular basis. Contact information needed for a records salvage operation, including names, addresses, telephone numbers, policies and procedures, will be useless if information is not current.

Summary

Disaster recovery programs are conducted to salvage county government's vital records in the event of disaster. The preliminary concerns include instituting a vital records protection program and providing security. Necessary elements of a salvage operation include a building safety inspection immediately following the disaster, the establishment of a communications center, the appointment of a recovery coordinator and appropriate departmental liaisons, and obtaining logistical support which includes necessary employees, equipment and supplies, and consultants.

Using records retention schedules, decisions to salvage or destroy records can be made by the division. Salvage methods are specific to the volume and media of records being saved.

Aiding county officials and their staff with disaster recovery is a cooperative effort of the Bureau of Archives and Records Preservation and the Bureau of Records Management of the Division of Archives and Records Management. The division provides records salvage advice to county offices without charge. Archivists and records analysts are available to assist in recovery efforts.

For disaster assistance call the Bureau of Archives and Records Preservation (609) 292-6260, or the Bureau of Records Management at (609) 530-3200. To discuss disaster prevention planning call or write: New Jersey Department of State, Division of Archives and Records Management, 2300 Stuyvesant Avenue, CN 307, Trenton, New Jersey, 08625.